**Factors Affecting the Rate of Enzyme Activity**

**Post Lab Questions:**

1. Name two different sources where you could obtain catalase.
2. Write a balanced chemical equation for the reaction.
3. Create the following graphs using the class data. Make sure you use proper graphing techniques.
4. Enzyme Activity vs Substrate Concentration
5. Enzyme Activity vs Enzyme Concentration
6. Enzyme Activity vs Temperature (include the data for temperature above and below on 1 graph)
7. Enzyme Activity vs pH (include the data for pH above and below on 1 graph)
8. Based on your data, describe how Substrate Concentration affects the activity on an enzyme. Be specific and explain.
9. Based on your data, describe how Enzyme Concentration affects the activity on an enzyme. Be specific and explain.
10. Based on your data, describe how temperature affects the activity on an enzyme. Be specific and explain. Discuss any effects on protein structure.
11. Based on your data, describe how pH affects the activity on an enzyme. Be specific and explain. Discuss any effects on protein structure.

**Reflect:**

In your conclusion, discuss what improvements you would make if you were to redo your procedure.

**Marking Scheme**:

Purpose 0 1

Materials 0 1 2

Method 0 1 2

Observations 0 2 4 6 8

Questions

1. 0 1
2. 0 1
3. a) 0 1 2 3 4 5

b) 0 1 2 3 4 5

c) 0 1 2 3 4 5 6

d) 0 1 2 3 4 5 6

1. 0 1 2
2. 0 1 2
3. 0 1 2 3
4. 0 1 2 3

Conclusion 0 1 2

Improvements 0 1 2

References (APA) 0 1

Rough 0 1

Total /53